

REMARKS

Reconsideration of the above-identified patent application in view of the amendment above and the remarks below is respectfully requested.

Claims 9, 12, 16-17 and 21 have been canceled in this paper. Claims 5-7, 10-11 and 18 have been amended in this paper. New claims 22-27 have been added in this paper. Therefore, claims 5-8, 10-11, 18-20 and 22-27 are pending and are under active consideration.

In the outstanding Office Action, the Patent Office states that claim 21 has been withdrawn from consideration “as being directed to a non-elected invention.” The Patent Office further states that “[a] complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.”

In response to the above, Applicants note that claim 21 has been canceled herein.

Claims 5-12 and 16-18 stand rejected under 35 U.S.C. 103(a) “as being unpatentable over Liebermann [Pat. No. 5,189,948] in view of Radiant Wall Oven and Dagerskog et al [Pat. No. 4,565,704].” In support of the rejection, the Patent Office states the following:

Liebermann teaches a method of cooking meat by preheating the meat at a first station (Figure 1, #38), applying infrared radiant heat at a searing station in order to char the meat (Figure 1, #40) applying steam to the meat at a second station in order to fully cook it (Figure 1, #10), cooling the cooked and charred meat at a third station (Figure 1, #42), transporting the product between the stations with a conveyor belt (Figure 1, #16), applying radiant heat at 1500-1700°F (column 6, line 14), and the steam being up to 205°F (column 4, line 60). Liebermann does not teach the first station being infrared heating, the meat being boned pork, separate conveyors, the infrared heating lasting for 1.5-1.75 minutes, and the steam cooking lasting for two hours. Radiant Wall Oven [RWO] teaches a method of heating food in a first browning station which employs 1500°F radiant heat, a second station which employs a steam oven, and separate conveyors for each station (illustration). Dagerskog et al

teach a method of cooking pork chops (column 3, line 16) with infrared heat. It would have been obvious to one of ordinary skill in the art to incorporate the pork chops of Dagerskog et al into the invention of Liebermann et al since both are directed to methods of cooking meat, since Liebermann et al already included infrared heating (Figure 1, #40) and the use of meat in general (column 1, line 11), and since boned meats were commonly cooked with infrared heat as shown by Dagerskog et al (column 3, line 16). It would have been obvious to one of ordinary skill in the art to incorporate the first station infrared heating of RWO into the invention of Liebermann et al since both are directed to methods of cooking, since Liebermann et al already included a preheating first station (Figure 1, #38) as well as an infrared charring station (Figure 1, #40), since RWO teaches that foods were commonly browned with infrared heating before they were fully cooked (illustration), and since placing the infrared heating of Liebermann et al at the first station would have provided the preheating while simultaneously eliminating the need for a microwave station and the additional IR heating station and thus provided a savings in cost and space. It would have been obvious to one of ordinary skill in the art to incorporate the separate conveyors of RWO into the invention of Liebermann et al since both are directed to cooking methods, since Liebermann et al already possessed multiple stations connected by a conveyor (Figure 1, #16), and since the separate conveyors of RWO would have provided more flexibility by permitting the replacement of a station, for maintenance or cleaning, without the need to shut down the entire process. It would have been obvious to one of ordinary skill in the art to steam for two hours and heat with infrared radiation for 1.5-1.75 minutes in the invention of Liebermann et al since Liebermann et al already included steam heating to provide full-cooking and infrared heating to provide a charring effect (Figure 1, #10 & 40) but does not recite any preferred treatment times, since treatment times such as these were commonly used, and since the treatment times would have been varied during the course of normal experimentation and optimization due to such factors as the size of the meat product, the desired degree of cooking and charring, and type of meat to name but a few examples.

Later in the Office Action, the Patent Office states the following:

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on

combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicants argue that Dagerskog does not teach IR heating of the meat. However, Dagerskog clearly shows IR heaters placed both above and below the meat as it travels through the device (Figure 1, #17-18).

In response to applicant's argument that including RWO in the invention of Liebermann would destroy it, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, Liebermann teaches a process for precooking meat by use of a full-cooking step, a braising step, and a freezing step; while RWO teaches a method of precooking meat by first braising the meat and then cooking it. It would have been obvious to one of ordinary skill in the art to incorporate the first station infrared heating of RWO into the invention of Liebermann et al since both are directed to methods of cooking, since Liebermann et al already included a preheating first station (Figure 1, #38) as well as an infrared charring station (Figure 1, #40), since RWO teaches that foods were commonly browned with infrared heating before they were fully cooked (illustration), and since placing the infrared heating of Liebermann et al at the first station would have provided the preheating while simultaneously eliminating the need for a microwave station and thus provided a savings in cost and space.

Applicants respectfully traverse the foregoing rejection. As noted in MPEP 2143, it is well-settled that the Patent Office bears the burden of establishing a *prima facie* case that a claimed invention is obvious over the prior art. Absent such a *prima facie* case of obviousness by the Patent Office, Applicants are under no obligation to submit any evidence of nonobviousness and the claimed invention is presumed to be nonobvious.

As additionally set forth in MPEP 2143, to establish a *prima facie* case of obviousness, the following criteria must be met: First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all claim limitations. Both the teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art and may not be based solely on applicant's disclosure.

In view of the above, it is clear that the initial burden is on the Patent Office to provide some suggestion of the desirability of doing what the inventor has done. Either the references must expressly or impliedly suggest the claimed invention or the Patent Office must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references. When the motivation to combine the teachings of the references is not immediately apparent, it is the duty of the Patent Office to explain why the combination of the teachings is proper.

Moreover, as noted in MPEP 2143.01, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In fact, if the proposed modification or combination would render the prior art invention being modified unsatisfactory for its intended purpose or would change the principle of operation of the prior art invention being modified, then there is no suggestion or motivation to make the proposed modification. Applying the above principles to the case at hand, Applicants respectfully submit that the Patent Office has failed to establish a *prima facie* case of obviousness.

As best understood by Applicants, the Patent Office appears to be contending that (i) Liebermann et al. teaches all of the limitations of independent claims 5 and 18 (prior to the present amendment), except for the first station being infrared heating and the meat being boned pork; (ii) Radiant Wall Oven (“RWO”) teaches “a first browning station which employs 1500° radiant heat [and] a second station which employs a steam oven”; (iii) Dagerskog et al. teaches a method of cooking pork chops; and (iv) it would have been obvious “to incorporate the pork chops of Dagerskog et al into the invention of Liebermann et al” and “to incorporate the first station infrared heating of RWO into the invention of Liebermann” in place of the microwave station.

The Patent Office’s position that it would have been obvious to one of ordinary skill in the art at the time of the invention to replace the Liebermann microwave with the RWO radiant heater is apparently predicated on the contention that the Liebermann microwave and the RWO radiant heater serve an equivalent preheating function. Applicants respectfully disagree for the reasons below.

Liebermann et al. explicitly teaches (see col. 3, lines 31-39 and col. 5, line 58 through col. 6, line 6) that, prior to entering the spiral conduction vapor cooker, the food product is preheated in a microwave to “[elevate] **internal** temperatures of the food product from 36-40 degrees to about 120-160 degrees Fahrenheit **without appreciable heating of the surface portions** within a time frame of about 4-8 minutes.” (Emphasis added.) The reason given by Liebermann et al. for elevating the **internal** temperature of the food product in the microwave, prior to entry in the steam cooker, is for the **internal** temperature of the food product to match the vapor temperature within the steam cooker. In this manner, Liebermann et al. teaches, the **internal** temperature of the food product may be gradually raised to about 160-180 degrees Fahrenheit as it is conveyed through the steam cooker.

As can readily be appreciated, whereas the Liebermann microwave cooks from the inside-out, rapidly raising the internal temperature of a food product, the radiant heater of RWO works in precisely the opposite fashion, namely, cooking from the outside-in to char the exterior surface of the food product without appreciably cooking the interior of the food product. Consequently, because it would not serve to elevate sufficiently the internal temperature of a food product without completely drying out the food product and because it would appreciably heat the surface portions of the food product (both features having been taught explicitly away from by Liebermann et al.), the radiant heater of RWO is unsuitable for use as a preheater in the Liebermann system. Accordingly, because the proposed modification of the Liebermann system to include the RWO radiant heater in place of the microwave preheater would run directly counter to the explicit teachings of Liebermann et al., a person of ordinary skill in the art would not have been motivated to make the proposed modification.

In addition to being patentable over the applied combination of references for the reasons given above, claims 5 and 18, as amended herein, are additionally distinguishable over the applied art for the reason that the references do not teach or suggest all of the temperatures and heating intervals specified therein.

Claim 11 is further patentable over the applied combination of references for at least the reason that the references do not teach or suggest a second conveyor belt for transporting the food product from the second station to the third station.

Accordingly, for at least the above reasons, the foregoing rejection should be withdrawn.

Claim 19 stands rejected under 35 U.S.C. 103(a) “as being unpatentable over Liebermann et al, in view of RWO and Dagerskog et al, as applied above, and further in view of Mauer et al [Pat. No. 5,741,536].” In support of the rejection, the Patent Office states the following:

Liebermann et al, RWO, and Dagerskog et al teach the above mentioned concepts. Liebermann et al, RWO, and Dagerskog et al do not teach marinating the meat. Mauer et al teach a method of cooking meat by first marinating it (Figure 1, #13). It would have been obvious to one of ordinary skill in the art to incorporate the marinating of Mauer et al into the invention of Liebermann et al since both are directed to methods of cooking meat, since Liebermann et al already included the use of flavor enhancers such as seasoning, salts, and spices (column 2, line 64), since meats were commonly marinated prior to being cooked, and since Mauer et al teach that marinating improves the moistness and flavor of the meat as they are heated (column 3, line 1).

Applicants respectfully traverse the foregoing rejection. Claim 19 depends from claim 18. Claim 18 is patentable over Liebermann et al., RWO and Dagerskog et al. for at least the reasons given above. Mauer et al. fails to cure all of the deficiencies of Liebermann et al., RWO and Dagerskog et al. with respect to claim 18. Therefore, based at least on its dependency, claim 19 is patentable over the applied combination of references.

Accordingly, for at least the above reasons, the foregoing rejection should be withdrawn.

Claim 20 stands rejected under 35 U.S.C. 103(a) “as being unpatentable over Liebermann, in view of Radiant Wall Oven, Dagerskog et al, and Mauer et al, as applied above, and further in view of Shaw et al [Pat. No. 4,196,219].” In support of the rejection, the Patent Office states the following:

Liebermann, Radiant Wall Oven, Dagerskog et al, Mauer et al teach the above mentioned concepts. Liebermann, Radiant Wall Oven, Dagerskog et al, Mauer et al do not teach immersing the cooked meat in a glaze before freezing. Shaw et al teach a method of

treating meat by cooking it, immersing it in a glaze, and freezing it (column 2, line 47 to column 3, line 24). It would have been obvious to one of ordinary skill in the art to incorporate the glaze of Shaw et al into the invention of Liebermann, in view of Radiant Wall Oven, Dagerskog et al, and Mauer et al, since all are directed to methods of treating meat, since Liebermann already included cooking and freezing (Figure 1, #14 & 40), since Liebermann already included coating the meat with drippings from other pieces of meat (column 3, lines 3-19), and since Shaw et al teach that the glaze extended the storage life of the meat (abstract).

Applicants respectfully traverse the foregoing rejection. Claim 20 depends from claim 19. Claim 19 is patentable over Liebermann et al., RWO, Dagerskog et al. and Mauer et al. for at least the reasons given above. Shaw et al. fails to cure all of the deficiencies of Liebermann et al., RWO, Dagerskog et al. and Mauer et al. with respect to claim 19. Therefore, based at least on its dependency, claim 20 is patentable over the applied combination of references.

Accordingly, for at least the above reasons, the foregoing rejection should be withdrawn.

New claims 22-27 have been added. Claim 22 depends from claim 5 and is patentable over the references for at least the reasons given above for claim 5. In addition, claim 22 is further patentable over the references for the reason that none of the references teach or suggest a pair of spiral steam cookers.


Claim 23, from which claims 24-27 depend, is patentable over the references for at the least the same types of reasons given above for claims 5 and 18. In addition, claim 23 is further patentable over the references for the reason that none of the references teach or suggest a pair of spiral steam cookers or the three claimed conveyor belts.

In conclusion, it is respectfully submitted that the present application is in condition for allowance. Prompt and favorable action is earnestly solicited.

If there are any fees due in connection with the filing of this paper that are not accounted for, the Examiner is authorized to charge the fees to our Deposit Account No. 11-1755. If a fee is required for an extension of time under 37 C.F.R. 1.136 that is not accounted for already, such an extension of time is requested and the fee should also be charged to our Deposit Account.


Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on October 9, 2003.


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